



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of P. DE SCHRIJVER, et al. Docket No. Q55464
Appln. No. 09/384,422 Group Art Unit 2667
Confirmation No. 7818 Examiner Thai D. HOANG
Filed August 27, 1999

For: METHOD FOR TRANSPORTING DATA, A RELATED DATA TRANSMITTING
ELEMENT AND A DATA RECEIVING ELEMENT

SUBMISSION OF APPELLANT'S BRIEF ON APPEAL

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents
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Submitted herewith please find an original and two copies of Appellant's Brief on Appeal. A check for the statutory fee of \$330.00 is attached. The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account. A duplicate copy of this paper is attached.

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APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 1.192

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Sir:

In accordance with the provisions of 37 C.F.R. § 1.192, Appellant submits the following:

I. REAL PARTY IN INTEREST

The real party in interest is ALCATEL, by virtue of an assignment executed by Peter Paul Camille De Schrijver, Yves T'Joens, and Carmelo Zacccone (Appellant, hereafter), on August 20, 1999, and recorded by the Assignment Branch of the U.S. Patent and Trademark Office on August 27, 1999 (at Reel 010202, Frame 0271).

II. RELATED APPEALS AND INTERFERENCES

To the knowledge and belief of Appellant, the Assignee, and the undersigned, there are no other appeals or interferences before the Board of Appeals and Interferences that will directly affect or be affected by the Board's decision in the instant Appeal.

III. STATUS OF CLAIMS

Claims 3-12 are all the claims pending in the application.

Claims 3-12 stand finally rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

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In addition, claims 3, 5-7 and 9-12 stand finally rejected under 35 U.S.C. §102(a) as being anticipated by Hisanaga et al. (USP 5,907,556), hereinafter "Hisanaga" and claims 4 and 8 stand finally rejected under 35 U.S.C. §103(a) as being unpatentable over Hisanaga.

No other grounds of rejection or objection currently are pending. This appeal is directed to the rejected claims 3-12.

IV. STATUS OF AMENDMENTS

With the filing of this Brief, all Amendments have been entered and considered by the Examiner.

The application was originally filed with claims 1-10.

In response to the non-final Office Action, Appellant filed an Amendment under 37 C.F.R. § 1.111 on March 4, 2003. In this Amendment, claims 1 and 2 were canceled and substituted with new claims 11 and 12; in addition, claims 3-7 and 9-10 were amended.

In response to the final Office Action, Appellant filed a Response under 37 C.F.R. § 1.116 on August 15, 2003, making no amendments to the claims, and this Appeal was undertaken.

The Appendix included with this Brief, setting forth the claims involved in the appeal, reflects the claim changes made in the above-identified Amendment.

V. SUMMARY OF THE INVENTION

Appellant's invention is a method and a system for data communication. Specifically, a data transmitting network element (hereinafter "DTE") sends data to a data receiving network element (hereinafter "DRE") (Fig. 1; specification, page 3, lines 17 to 18). This DTE is a user terminal such as a personal computer (PC) and there might be a plurality of such user-terminals (specification, page 3, lines 15-16 and lines 23 to 25). The DRE may be a network access server situated at the edge of the internet network INNW (Fig. 1; specification, page 3, lines 26 to 28). This DRE provides the DTE access to the internet network INNW (specification, page 3, lines 28 to 29). In addition, the DRE might police the data sent from DTE to the DRE (specification, page 3, line 29 to page 4, line 2).

The DTE is described as including: data sending means ("DSM"); a service level requesting means ("SL_R_M") used for sending a request for a predetermined level service to the DRE, using Internet Protocol Control Protocol (hereinafter "IPCP"); a service level propose receiving means ("SLP_R_M") to receive an IPCP proposal and to notify the DSM of the proposal; and a service level propose renegotiating means ("SLP_RN_M") checks if the proposed level is satisfactory and if not, renegotiates the service level (Fig.2; specification, page 4, lines 5 to 18).

The DRE comprises data receiving means ("DRM") to receive data from DTE, service level request reception means ("SL_Re_M") to receive service level specification request using IPCP (Fig. 2; specification, page 4, line 29 to page 5, line 4). In addition, DRE has a negotiating and processing means ("SL_NP_M") which determines the level based on at least one predetermined criteria and formulates a proposal sent to DTE using service level proposal sending means ("SLP_S_M") of the DRE (Fig. 2; specification, page 5, lines 4 to 9).

In short, the DTE sends data to the DRE for subsequent transmission over another network such as the Internet (Fig. 1; specification, page 3, lines 13 to 29). The DRE is an edge node of the another network (Fig. 1; specification, page 3, lines 26 to 28). The service level negotiated between the DTE and DRE (using messages sent between the two on the first network) is a level of service relating to the sending of data over a different (second) network, viz., the INNW (specification, page 3, line 26 to page 4, line 4).

VI. ISSUES

Two issues are on appeal.

The first issue is whether claims 3-12 are improperly finally rejected under 35 U.S.C. § 112, first paragraph as containing subject matter not discussed in the specification.

The second issue is whether claims 3, 5-7, 9-12 are improperly rejected under 35 U.S.C. § 102(a) as being anticipated by Hisanaga and whether claims 4 and 8 are improperly rejected under 35 U.S.C. § 103(a) as being unpatentable over Hisanaga.

VII. GROUPING OF CLAIMS

For purposes of the present appeal, and the new matter and prior art rejections, the rejected claims stand or fall together.

VIII. ARGUMENTS

Issue 1 -- 35 U.S.C. § 112, first paragraph rejection.

Claims 3-12 stand rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected.

In order to comply with the written description requirement, the specification "need not describe the claimed subject matter in exactly the same terms as used in the claims; it must simply indicate to persons skilled in the art that as of the [filing] date the applicant had invented what is now claimed." *Dental Prodx, LLC v. Advantage Dental Prods.*, 309 F.3d 774, 779; 64 USPQ2d 1945, 1950 (Fed. Cir. 2002).

The Examiner asserts that the specification of the Application fails to teach or suggest "a second communications network", which is recited in independent claims 3, 5-7 and 9-11. In fact, the Examiner asserts that INNW (e.g. Internet), DTE and DRE are all elements of one network (see Advisory Office Action, page 2). In support the Examiner cites:

" In order to keep simplicity in this description it is chosen to only describe one personal computer DTE connected to the network, although there normally will be a plurality of such user-terminals.

Further there is a data receiving element DRE, that in this embodiment is chosen to be a network access server situated at the edge of the internet network INNW. The network access server provides the personal computer DTE access to the internet network INNW. Besides this, the network access server DRE may take care of policing the data the personal computer DTE

sends towards the network access server DRE," *emphasis added by the Appellant* (page 3, line 23 to page 4, line 2 of the originally-filed specification).

However, this citation, along with other paragraphs from the originally-filed specification, makes it clear that there are in fact two networks. The above-cited paragraph mentions that DRE is "situated on the edge of the Internet network INNW". Internet network INNW is one communications network (*also see* originally-filed specification, page 3, line 14; Fig. 1, "INNW"). As apparent to one of ordinary skill in the art, there can be no question that the Internet is a communication network. In Figure 1, this communication network is clearly shown as a cloud. In the claims, this is the "second communication network."

Next, the originally-filed specification focuses on the communication between the DTE and the DRE. The DTE is not connected to the INNW. In an illustrative, non-limiting embodiment of the present invention, "DRE... is chosen to be a network access server situated at the edge of the internet network INNW. This network access server provides the personal computer DTE with access to the internet network INNW" (see page 3, lines 26 to 29 of the originally-filed specification). One of ordinary skill in the art realizes that there must be some sort of a communication network between a PC and a server; this is a network whether the server further provides access to databases or other networks such as the internet.

In other words, the DTE is not connected to the INNW. DTE is connected to another network that is not the INNW. That is to say, there is a network between the DTE and the DRE. Specifically, DTE and DRE communicate with each other using IPCP messages as described in the originally-filed specification. The two elements are connected to each other by various input and output terminals, as shown in Figure 2 and explained on page 4, lines 18 to 25 and page 5, lines 10 to 19 of the originally-filed specification. In addition, Figure 1 clearly shows a communication line between the DTE and DRE. It is unquestionable that DTE and DRE communicate with each other. It is important to note that the originally-filed specification explains that only one DTE is drawn in the figure for simplicity of explanation. This makes it clear that more than one DTE is understood to be communicating with the DRE (as would be

expected in most networks). One of ordinary skill in the art knows that generally, "a network" is a communication line, which interconnects computer systems at various different sites¹. As such, there is, unquestionably, a communication network between DTEs and the DRE. In the claims, this is the "first communication network."

Since the originally-filed specification fully supports the requirements for a first communication network (i.e., the network between the DTEs and the DRE in the embodiment of Fig. 1) and for a second communication network (i.e., the internet INNW in the embodiment of Fig. 1), it is clear that the written description requirement is met.

One of ordinary skill in this art understands the Internet is a network, and a network of computers is a network distinct from the Internet. The originally-filed specification describes and clearly illustrates these two different networks. The provisions of §112, ¶1 prohibit neither the inclusion of these disclosed networks in the claims, nor the giving of simple ordinal names to these networks. There is therefore no ground for rejecting the claims under 35 U.S.C. §112, ¶1, and Appellant respectfully requests the Board to reverse this rejection.

Issue 2 -- 35 U.S.C. § 102(a) and 35 U.S.C. § 103(a) rejections

The Examiner admits that the amended claims reciting a first and a second communication network is different from Hisanaga (see page 11 of the Final Office Action). However, the Examiner's final rejection notes that the Examiner thought the requirements relating to first and second communication networks to constitute impermissible new matter. Because the requirements were thought to be new matter, the Examiner did not give the requirements any patentable weight (Final Office Action, page 11).

Above, Appellant has shown that the requirements relating to the first and second communication networks are well supported in the originally-filed specification, and do not

¹ Butterfly Glossary, Internet Communication Terms and Glossary.
<http://www.cnuce.pi.cnr.it/Butterfly/GlossarioMN.html#Network> (last visited on October 14, 2003).

constitute impermissible new matter. As such, Applicant respectfully submits that these rejections should be withdrawn.

Specifically, the requirements relating to the first and second communication networks are unmet in Hisanaga. Hisanaga teaches a data transmission system in which a data sending unit 1 communicates with a data receiving unit 2 over a transmission medium 4 (Fig. 6; col. 8, lines 20 to 21). Many sending units may communicate over the transmission medium 4 with the data receiving unit 2 (Fig. 7, col. 10, lines 48 to 52). The data receiving unit 2 has a built-in controller which controls the timing at which the data sending units 1 may send data to the data receiving unit 2 (col. 9, lines 10 to 12). The control unit 3 responds to requests from the sending units 1 for changes in allotted bandwidth and sets the bandwidth allotted to each sending unit 1 so as to avoid contention. The bandwidth controlled by control unit 3 is the bandwidth of the transmission medium 4 that is between the sending units 1 and the receiving unit 2 (col. 9, lines 13 to 47).

However, in Hisanaga, the sending units 1 and receiving unit 2 relate to communications only over that same network (between the sending unit 1 and receiving unit 2 via transmission medium 4). That is, Hisanaga teaches only one network and allocating bandwidth for this network. Hisanaga fails to teach or suggest that the data from the sending unit 1 communicated by receiving unit 2 via transmission medium 4 pertain to a service level for another network. In short, Hisanaga provides no teaching or suggestion that would have enabled the artisan of ordinary skill to have achieved the requirements of two networks. The Hisanaga reference cannot reasonably be said to anticipate or render obvious any of the subject matter of the independent claims. Appellant therefore respectfully submits that the claims are neither anticipated nor obvious in view Hisanaga.

IX. CONCLUSION

Appellant respectfully requests the Board to reverse the outstanding rejection under 35 U.S.C. §112, ¶1 and the prior art rejections.

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The present Brief on Appeal is being filed in triplicate. Unless a check is submitted herewith for the fee required under 37 C.F.R. §1.192(a) and 1.17(c), please charge said fee to Deposit Account No. 19-4880.

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APPENDIX

CLAIMS 3-12 ON APPEAL:

1 3. A data transmitting element (DTE) to be used for sending data, over a link through a first
2 communications network, towards a data receiving element (DRE) for communication of said
3 data over a second communications network, said DTE comprising:

4 data sending means (DSM), adapted to send said data towards said DRE;

5 service level requesting means for generating an Internet Protocol Control Protocol (IPCP)
6 message, for sending to said DRE, requesting a service level for communicating said data
7 of said DTE over said second communications network; and

8 service level proposal receiving means:

9 adapted to receive from said DRE an IPCP message indicating a proposed service level
10 that said DRE can provide for communicating said data of said DTE over said second
11 communications network, and

12 notifying said DSM of said service level proposal.

1 4. The DTE according to claim 3, further comprising service level proposal renegotiating
2 means, coupled between an output terminal of said service level proposal receiving means and an
3 input terminal of said service level requesting means, for generating another IPCP message
4 requesting a service level, different from the proposed service level indicated in said IPCP
5 message from said DRE, in response to an indication that said proposed service level is not a
6 satisfying service level.

1 5. A data receiving element (DRE), to be used for receiving data from a data transmitting
2 element (DTE), over a link through a first communications network, and communicating said
3 data over a second communications network, said DRE comprising:

4 data receiving means (DRM), adapted to receive said data from said DTE;
5 service level request reception means for receiving an Internet Protocol Control Protocol
6 (IPCP) message, from said DTE, indicating a requested service level for said
7 communicating of said data of said DTE over said second communications network;
8 service level negotiating and proposing means, coupled with said service level request
9 reception means, for determining a service level that said DRE can provide for
10 communicating said data of said DTE with said second communications network, based on
11 at least one predetermined criterion and on said requested service level, and formulating, as
12 a service level proposal, an IPCP message indicating said determined service level; and
13 service level proposal sending means, coupled with said service level negotiating and
14 proposing means, for sending said IPCP message as said service level proposal.

1 6. A data receiving element (DRE), to be used for receiving data from a data transmitting
2 element (DTE), over a link through a first communications network, and communicating said
3 data over a second communications network, said DRE comprising:

4 data receiving means (DRM), adapted to receive said data from said DTE;
5 service level negotiating and proposing means, for determining a service level that said DRE
6 can provide for communicating said data of said DTE with said second communications
7 network, based on at least one predetermined criterion and on said requested service level,
8 and formulating, as a service level proposal, an IPCP message indicating said determined
9 service level; and
10 service level proposal sending means, coupled with said service level negotiating and
11 proposing means, for sending said IPCP message as said service level proposal.

1 7. A software module for running on a processing system for inclusion in a data transmitting
2 element (DTE), for sending data, over a link through a first communications network, towards a

3 data receiving element (DRE) for communication of said data over a second communications
4 network, said software module comprising:

5 a data sending sub-module, adapted to send said data towards said DRE;

6 a service level requesting sub-module, for generating an Internet Protocol Control Protocol
7 (IPCP) message, for sending to said DRE, requesting a service level for communicating
8 said data of said DTE over said second communications network; and

9 a service level proposal receiving sub-module:

10 adapted to receive from said DRE an IPCP message indicating a proposed service level
11 that said DRE can provide for communicating said data of said DTE over said second
12 communications network, and
13 notifying said data sending sub-module of said service level proposal.

1 8. The software module according to claim 7, further comprising a service level proposal
2 renegotiating sub-module, co-operating with said service level proposal receiving sub-module
3 and said service level requesting sub-module, for generating another IPCP message requesting a
4 service level, different from the proposed service level indicated in said IPCP message from said
5 DRE, in response to an indication that said proposed service level is not a satisfying service
6 level.

1 9. A software module for running on a processing system for inclusion in a data receiving
2 element (DRE), for receiving data from a data transmitting element (DTE), over a link through a
3 first communications network, and communicating said data over a second communications
4 network, said software module comprising:

5 a data receiving sub-module, adapted to receive said data from said DTE;

6 a service level request reception sub-module, for receiving an Internet Protocol Control
7 Protocol (IPCP) message, from said DTE, indicating a requested service level for said
8 communicating of said data of said DTE over said second communications network;

9 a service level negotiating and proposing sub-module, co-operating with said service level
10 request reception sub-module, for determining a service level that said DRE can provide
11 for communicating said data of said DTE with said second communications network, based
12 on at least one predetermined criterion and on said requested service level, and
13 formulating, as a service level proposal, an IPCP message indicating said determined
14 service level; and
15 a service level proposal sending sub-module, co-operating with said service level negotiating
16 and proposing sub-module, for sending said IPCP message as said service level proposal.

1 10. A software module for running on a processing system for inclusion in a data receiving
2 element (DRE), for receiving data from a data transmitting element (DTE), over a link through a
3 first communications network, and communicating said data over a second communications
4 network, said software module comprising:

5 a data receiving sub-module, adapted to receive said data from said DTE;
6 a service level negotiating and proposing sub-module, for determining a service level that said
7 DRE can provide for communicating said data of said DTE with said second
8 communications network, based on at least one predetermined criterion and on said
9 requested service level, and formulating, as a service level proposal, an IPCP message
10 indicating said determined service level; and
11 a service level proposal sending sub-module, co-operating with said service level negotiating
12 and proposing sub-module, for sending said IPCP message as said service level proposal.

1 11. A method for data communication, comprising:

2 setting a level of service for a data transmitting network element (DTE), said DTE being
3 connected to a data receiving network element (DRE) via a point-to-point connection of a
4 first communications network, said DRE being connected to a second communications

5 network, said level of service relating to transporting data between said DTE and said
6 second communications network via said DRE, wherein said level of service is set by:
7 determining, at said DRE, a service level that said DRE can provide for communicating
8 said data of said DTE with said second communications network, based on at least
9 one predetermined criterion;
10 formulating, at said DRE, an Internet Protocol Control Protocol proposal indicating said
11 determined service level;
12 sending said Internet Protocol Control Protocol proposal to said DTE; and
13 receiving said Internet Protocol Control Protocol proposal at said DTE; and then
14 transporting said data between said DTE and said second communications network via said
15 DRE according to said level of service indicated in said Internet Protocol Control Protocol
16 proposal.

1 12. The method for data communication as set forth in claim 11, further comprising:
2 before said determining of said service level at said DRE:
3 sending, from said DTE to said DRE, an Internet Protocol Control Protocol request
4 indicating a requested level of service; and
5 receiving at said DRE said Internet Protocol Control Protocol service level request sent
6 from said DTE;
7 wherein said determining of said service level at said DRE is based also on said requested level
8 of service of said DTE.